EAO Response to Data Gaps

This document has been prepared to respond to data gaps identified by the Bureau of Land Management (BLM), Vernal Field Office regarding Enefit American Oil's (EAO) utility corridor and Dragon Road improvement right-of-way (ROW) application pertaining to the BLM's Utility Corridor Project Environmental Impact Statement (EIS). Data gaps were transmitted by the BLM in two files – one specifically addressing gaps in baseline data (*EPG-BLM_BaselineReport_DataGapReview_12-29-14_trackchanges.docx*), the second specifically addressing gaps in EAO's Detailed Plan of Development (DPOD; *EPG-BLM_POD_DataGapReview_11-12-14.docx*). Data gaps were identified for the utility corridor portion of the application ("the Utility Corridor Project"), although responses below also refer to EAO's private land development ("the South Project"). Comments are addressed below accordingly and organized by data gap filename, original document/section (where provided by BLM), data gap text, and EAO response. It should be noted that the source documents will not be reissued as subsequent revisions; rather, all responses will be directly addressed herein.

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Baseline Community Analysis (BCA; Prepared by GSBS Richman Consulting, April 2014)

Data Gap No. 1

"While EAO did provide additional information on low income populations in Uintah County in their response, it is not sufficient to determine if there are EJ populations that may be impacted by the project. In order to make this determination it is necessary to examine the Census data at a finer scale (track, blocks, or block groups) closest to the project area and compare the percentage of minority or low income individuals with percentage in the state or county. This analysis is necessary in order to conclude whether or not there are potential EJ populations in the study area which then can be used to evaluate whether these populations will be impacted disproportionately by the proposed project. Note: This comment also was submitted by EPA during scoping."

EAO Response:

The United States Census Bureau's 2010 data for Census Tract 9402.01, Block Group 1, in southeastern Uintah County (where the Utility Corridor Project is located) reports the following minority percentages of the total population of 710:

- Black or African American – 0.1%;
- American Indian and Alaska Native – 36.2%;
- Asian – 0.1%;
- Hispanic or Latino – 5.8 %;
- Native Hawaiian and Other Pacific Islander – 0.7%; and
- Some Other Race – 3.6%.

For that same block group in 2010, the Bureau reported a total of 218 (+/-159) out of 811 (+/-225) individuals had an income in the prior 12 months below the poverty level.

For Uintah County as a whole, the Bureau's 2010 data reports the following minority percentages of the total population of 32,588:

- Black or African American – 0.4%;
- American Indian and Alaska Native – 7.7%;
- Asian – 0.5%;
- Hispanic or Latino – 7.1%;
- Native Hawaiian and Other Pacific Islander – 0.2%; and
- Some Other Race – 2.2%.

The Bureau reported a total of 3,570 (+/-929) out of 31,758 (+/-370) individuals had an income in the prior 12 months below the poverty level in Uintah County.

For the State of Utah, the Bureau's 2010 data reports the following minority percentages of the total population of 2,763,885:

- Black or African American – 1.1%;
- American Indian and Alaska Native – 1.2%;
- Asian – 2.0%;
- Hispanic or Latino – 13.0%;
- Native Hawaiian and Other Pacific Islander – 0.9%; and
- Some Other Race – 6.0%.

The Bureau reported that 13% of the people of the State of Utah lived below the poverty line in 2010.

Data Gap No. 2

"EAO did provide additional information on property taxes in their response, including a description of how property is taxed in Uintah County. However, the discussion only considered the property taxes of the private land within the corridor and not of the transmission line. The valuation of the transmission line would be undertaken using the centrally assessed property rules provided by the Property Tax Division of the Utah State Tax Commission. Property taxes for the transmission line would be centrally assessed and collected annually by Uintah County. This information should be included in the baseline report.

Additional information was provided on the sales and use tax and property tax that would result from the South Project. Additional information is needed on the approach used to estimate these taxes in order to evaluate whether or not that is reasonable.

A discussion should be included in the baseline study on the tax revenues generated in Uintah County for each type of tax (e.g. sales and use, property, etc.)."

EAO Response:

The property tax values and utility corridor acreages provided in the response to Data Gap No. 3 (submitted to BLM October 10, 2014) were reported in terms of both the pipeline utilities and the transmission lines. As correctly noted above in the data gap, the valuation of the transmission line property taxes would be undertaken using the centrally assessed property rules provided by the Property Tax Division of the Utah State Tax Commission. The corresponding acreages by Federal, state and private land for each of the pipelines and the transmission lines are provided in Tables 4-1 through 4-6 of the DPOD (submitted to the BLM April 23, 2014).

The sales and use tax and property tax that would result from the non-Federal connected action South Project were estimated by GSBS Richman Consulting utilizing the IMPLAN modeling software platform and were provided to the BLM as Table 1 in the data gap response submitted October 10, 2014 . Economic impacts are generated from the investment in construction of the project and from ongoing operations. IMPLAN was used to estimate the impacts to jobs, income, gross domestic product and overall economic output, including tax revenue for Vernal City and Uintah County. It should be noted that IMPLAN's modeling algorithm is limited by the horizon of the U.S. Bureau of Labor Statistic projections to 2030. GSBS Richman Consulting used the year 2030 impacts to project impacts through the end term of the South Project. GSBS Richman Consulting is a qualified, independent socioeconomic impact consulting firm located in Salt Lake City that has performed similar services for other Uintah County development projects, and IMPLAN is a widely-used and accepted economic modeling platform. EAO does not see a need for, or understand what other specific information is needed by, the BLM to determine the approach used to estimate the non-Federal connected action South Project taxes, or for the BLM to evaluate if the information provided is reasonable. If the BLM is unwilling to accept the GSBS Richman Consulting data and/or the use of IMPLAN as the economic modeling platform, this should be clearly stated, as well as the reason for the assumed deficiency and corrective action suggested.

Data Gap No. 3

"EAO indicates in their response that the BCA (Section 1.1) provides an 'extensive list' of stakeholders which they have coordinated with. The list is one page and primarily general in nature. In addition, EAO does not identify Tribes as stakeholders or if any agricultural interests were consulted. More context is needed to address how these stakeholder groups view the project, how will the project affect their way of life, and have any conflicts been identified. For instance, EAO indicated that 60% of land ownership is with the Federal government in Uintah County. Does this fact influence the opinion of any of the stakeholder groups?"

EAO Response:

The BLM conducted public scoping as part of the Utility Corridor Project EIS process in 2013, holding open houses/scoping meetings in both Vernal and Salt Lake City, Utah; publishing notification of the meetings in local newspapers and distributing mailed information newsletters to stakeholders; and providing a scoping report summary on their website as part of the public process. EAO's stakeholder outreach for the Utility Corridor Project and the South Project is incidental to the BLM's public process

and is not germane to the EIS itself. BLM's scoping and public review of draft and final environmental impact statement documents, and the comments generated therefrom, should be the relevant gauge of how stakeholders "view the project," how it "will affect their way of life," and if there are any perceived "conflicts". It is important to note, however, that BLM's National Environmental Policy Act review process should not be considered a "popularity contest" in which stakeholders "vote" on the merits of the Utility Corridor Project to influence the decisionmaker. Rather, the project should be considered from all aspects, such that the decisionmaker makes an informed and balanced selection from the viable alternatives.

Regarding Tribal outreach, EAO in fact met with the Ute Tribe in Ft. Duchesne, Utah in February 2014 to brief them on both the Utility Corridor Project and the South Project. To date, the Tribe has raised no concerns or identified any conflicts with either project to EAO.

Delineation of Waters of the U.S. and State of Utah for Enefit Oil Shale Mining and Production Complex, Uintah County, Utah (SWCA, July 23, 2013)

Data Gap No. 4

"The report does not authorize or make a determination. It has been submitted to the USACE for their consideration in making a final determination of jurisdictional status. We expect a conclusion will be made after the USACE reviews the delineation report. Future permit applications (to the State and the USACE) will be made on the basis of that final determination. *Comment noted. Once a final determination is received, please submit to BLM/EPG.*" (Section 5.1.1, 5.2.1, 5.3.1, 5.4.1, and 5.5.1)

EAO Response:

The United States Army Corps of Engineers issued a formal determination of jurisdiction April 10, 2014. The formal determination letter was included as Appendix A to the Detailed Plan of Development, which was submitted to the BLM April 23, 2014.

EPG-BLM_POD_DataGapReview_11-12-14.docx

Data Gap No. 5

"Data gaps have been identified by the BLM for the gas compressor station that would tie into Questar's line. Please provide information for this portion of the project description. *Note: This data gap was identified during the August 5, 2014 cooperating agency meeting*."

EAO Response:

A gas compressor at the Questar tie-in point is not currently anticipated. The inlet pressure required for the South Project, as currently contemplated, is low enough that the existing pressure in the Questar line is sufficient for delivery to the South Project site. The required inlet pressure for the South Project is subject to change as design of the facility continues, which may ultimately result in the need for a small compressor station at the tie-in. In the event a gas compressor at the tie-in point was needed, this would consist of a skid-mounted compressor unit, motor control center, and appurtenant above-ground valves

and pig launcher for maintenance inspections. The skid-mounted equipment would be contained within an enclosure and would require approximately 1.0 acre (in addition to the 0.5 acre already planned for the meter station).

Data Gap No. 6

"In the July 31, 2013 comments on the Preliminary Draft Chapter 2 – Proposed Action and Alternatives text that were provided to Enefit by the BLM, temporary acres of disturbance were requested along with permanent acres of disturbance for the water, gas, product supply pipelines. Tables 4-1, 4-2, and 4-3 only address permanent disturbance for each pipe at 50 feet wide. Please confirm that all temporary disturbance for the pipelines will occur within the 50-100 ft wide permanent right-of-way grant for the pipelines." (DPOD Section 4.1.1, 4.1.2, 4.1.3)

"*Notes from July 10, 2014 Coordination Call: Enefit to provide response. BLM will need info in order to issue a temporary use permit for construction.*"

EAO Response:

The water, gas, and product pipelines effectively have three different cross-sections (CS) with two different widths, as shown in Appendix B of the DPOD: 1) Where the water line only is present (CS B, 50 feet wide); 2) Where the product line only is present (CS D, 50 feet wide); and 3) Where all three pipelines are present together (CS E, 100 feet wide). For the first two categories, where only a single pipeline is present, the pipelines would be constructed within a 100-foot-wide corridor, 50-foot permanent plus 50-foot temporary ROW. However, it is important to note that, where these single pipelines are adjacent to proposed transmission lines (see CSs C1, C2, and D in Appendix B of the DPOD), the 25-foot temporary ROW would "overlap" with the 150-foot-wide permanent transmission line ROW in order to minimize total construction disturbance footprint. In other words, the 25-foot temporary workspace would be effectively located within the 150-wide permanent transmission line ROW and workspace. Since the water line and its adjacent transmission line would be constructed during the first construction mobilization, there would be not temporal difference in the overlapping construction disturbance. The same is true for the product pipeline and its adjacent transmission line, which would both be constructed during the second construction mobilization.

As shown in Figure 4-1 of the DPOD, the remaining CS category, where all three pipelines are present, would be constructed in an "inside-out" manner in two separate construction mobilizations. Construction equipment would utilize a center travel lane located between the water pipeline (constructed during the initial mobilization) and the natural gas and product pipelines (which would share a trench and be constructed in the second mobilization). In this CS category, no additional adjacent temporary workspace is required – the requested 100-foot permanent width is sufficient for construction (although EAO understands that separate 50-foot-wide ROW grants may be issued for water, natural gas, and product pipelines, even if they are adjacent and/or overlapping).

Data Gap No. 7

"When the pipeline segments of the utility corridor are built, it is understood that a construction access road will be developed in the ROW. In areas where the transmission line will be built parallel to the pipeline, is it the intent to use the same access roads as well? In areas where only the transmission line will be built, how does Enefit plan to access those areas without spur roads or new access? The existing access roads on the Appendix B map do not cover all segments of the utility corridors, so either new roads or spur roads will need to be built. To clarify, please provide the following:

- More detailed information on access in areas where the pipeline/transmission line will be built together.
- Access road plans in areas where only the transmission line will be constructed." (DPOD Section 4.2, page 16)

"*Notes from July 10, 2014 Coordination Call: Enefit to provide clarification and understands the comment.*"

EAO Response:

As stated and assumed above, it is the intent to use the same access roads in areas where the transmission line will be built parallel to the pipeline(s).

There is only one area – CS A, from points A to C and located directly south of the Bonanza Power Plant, as shown in Appendix B of the DPOD – where only a transmission line will be built. The remainder of the ROW contains both pipelines and power lines. For CS A, there are two existing roads that access the ROW in this area, shown as red lines on the DPOD Appendix B figure. Those existing roads would be used to gain access to the ROW, and then the remainder of the transmission line in this section would be accessed and built from within the ROW itself. There are, in fact, multiple existing named roads that can access the ROW in this area off of Highway 45, including Hatch Reservoir Road and Little Bonanza Road, as shown on the Uintah County Transportation System Map (available at http://www.co.uintah.ut.us/gis/Transportation%20System%20Map.pdf).

Existing roads for access in the Utility Corridor Project area are, in fact, plentiful. The longest stretch of ROW ***not*** crossed by an existing road is only 2 miles (the southernmost/terminal reach of the transmission lines as they cross into the Enefit South private property), and there are only three areas of approximately 1.5 mile where existing roads do not cross. The remainder of the ROW has existing road crossings at least every mile, and oftentimes more frequently. Only two new spur roads off of existing roads are planned, one on private land owned by EAO and one on BLM land. There is adequate existing access road infrastructure to access the ROW, and then construction, operation, and maintenance access would be along/within the ROW.

To be clear, some minor improvements may be necessary to these existing roads immediately prior to construction, primarily in the form of grading to remove ruts and/or high centers that could negatively impact safe vehicle travel. However, the specific roads, and the certain reaches of those roads, requiring improvement cannot be fully known at this time. The present condition of the access roads may not

necessarily be reflective of the condition leading up to construction. The actual need for improvement will be determined immediately prior to construction mobilization, and grading will only be conducted on those roads where travel is deemed to be not safe in the existing condition by the construction contractor. Grading is anticipated to be conducted by a standard tire- or track-mounted bulldozer (or similar equipment) with a standard 12-foot-wide front-mounted blade. It should be noted that many of these roads are traveled frequently by oil field services personnel today (e.g. tanker trucks, parts and equipment trucks, well pad and tank inspection trucks, etc.); therefore, the roads themselves should be adequate for similar travel by utility construction equipment seeking access to the ROW, and for inspection and maintenance equipment during the operational phase.

Access roads for the Utility Corridor Project are addressed in additional detail in the response to Data Gap No. 11 below, including a classification of existing roads that are not anticipated to require improvement and those that may require some minor improvement, and an access road map and shapefile are included with this response.

Data Gap No. 8

"In the July 31, 2013, comments on the Preliminary Draft Chapter 2 – Proposed Action and Alternatives text that were provided to Enefit by the BLM, the following information was requested from Enefit and is missing from this version of the document:

- Additional information on typical transmission line specifications: height of structures, width, diameter; conductor materials and specs; acres of temporary and permanent disturbance associated with pulling and tensioning sites, wire splicing sites, structure work areas, communication sites, and substations. (please refer to Table 2-1 in Preliminary Draft Chapter 2 dated July 31, 2013 for an example of how this information could be outlined.)
- Tower structure materials is referred to as steel in the POD – please clarify if it is galvanized steel or self-weathering steel." (DPOD Section 4.2, page 16)

"*Notes from July 10, 2014 Coordination Call: Enefit to coordinate with Moonlake Electric to obtain this information.*"

EAO Response:

The majority of the proposed transmission line circuits would be supported by single-circuit tangent wooden H-frame structure towers in a 1 x 3 arrangement (e.g. type class 1 or better Western Red Cedar poles). Tangent structures are primarily used in straight line segments and are the most common type of structure. Running angle towers would be used when the transmission line changes direction up to a specified threshold line angle and would have an additional wooden pole in the center for reinforcement, and dead-end structures would be needed for extremely long spans (such as the White River crossing), when the line angle exceeds the threshold of a running angle tower; in highly varied terrain which may create uplift conditions; or when there is a need for a failure containment structure. Dead-end structures are heavier and require larger foundations. For the dead-end tower cases, the material of construction would be galvanized steel. The use of steel poles and components allows the

tower structures to support increased loads and an increased tensioned conductor when compared to wooden tower structures, thus leading to increased span lengths. Tangent and angle structures would be direct-embedded in dual drilled borings, typically 1.5 feet in diameter and 8 to 10 feet deep each. Dead-end structures would be on steel-reinforced drilled pier foundations with a typical diameter of 2 feet and a depth of 10 to 15 feet.

The typical height of the tower structures is anticipated to range from 75 (for typical tangent and running angle towers) up to 90 feet (for steel crossing towers) above ground surface, depending on local topography (may be as low as 60 feet). Although specific tower locations have not yet been designed, a reasonable estimate for the average distance between wooden structures is 600 to 900 feet, and up to 1,300 feet between steel structures. The short-term (i.e. temporary) construction disturbance area per tower structure is estimated to be approximately 250 feet by 250 feet, or 1.43 acre, while the permanent disturbance area is estimate to be 50 feet by 50 feet, or 0.06 acre.

Conductor phase-to-phase and phase-to-ground clearance parameters would be determined in accordance with Moon Lake Electric Association (MLEA) company standards and the National Electrical Safety Code (NESC). These standards provide minimum safe distances between the conductors and the ground; crossing points of other lines and the transmission support structure; other conductors; and minimum working clearances for personnel during energized operation and maintenance activities. Typical conductor clearance above ground is anticipated to be between 25 and 40 feet (23 feet minimum clearance) for the 138-kV line. Conductor material would be non-specular (i.e. “dull” finish) aluminum/steel, or comparable as specified by MLEA company standards. There would be two overhead shield wires of 3/8-inch extra high strength at 120 degrees Fahrenheit. Three conductors are anticipated and would likely be 1272 thousand circular mil aluminum conductor steel reinforced (ACSR; although conductors may be up to 1590 MCM ACSR pending ongoing engineering design).

Pulling and tensioning sites for the 138-kV lines would be required approximately every 1 to 2 miles along the ROW and would require approximately 1.2 acres each to accommodate the required equipment. To the extent practicable, pulling and tensioning sites would be located within the permanent ROW. However, angle points typically necessitate pulling and tensioning outside the ROW. Depending on topography, minor grading may be required at some sites to create level pads for equipment, although all areas would be restored to their pre-construction contours following installation and re-seeded in accordance with the Utility Corridor Project reclamation plan.

To mitigate potential grounding concerns, fault shields, lumped grounding, gradient control wires, and/or gradient control mats may be deployed within the ROW as necessary, although the number and location of these features will be determine in the latter stages of utility engineering design. Primary communications for relaying and control would be provided via an optical ground wire that would be installed on the transmission lines. This system would solely be for MLEA and EAO use and would not be used for commercial purposes. No new microwave sites are anticipated. Because of the relatively short length of the transmission lines, no intermediate communication booster sites would be required; communication sites would only be located at the terminal ends of the lines.

Data Gap No. 9

"In addition, information on the 8.44-acre switchyard on BLM-administered land needs to be detailed and described. Information should include:

- Approximate site size (dimensions that equate to 8.44 acres)
- Equipment in the yard
- Access roads required for construction, operation, and maintenance
- Fire protection facilities
- Grounding
- Acres of permanent and temporary disturbance
- Voltage" (DPOD Section 4.2, page 16)

EAO Response:

There are three planned switchyard facilities: 1) The 138-kV Bonanza bus expansion/switchyard, which would be located at the origination point of the first transmission line at the existing Bonanza Power Plant and could be and expansion/addition to the existing plant switchyard or a separate/adjacent new switchyard; 2) The 138-kV South Project substation, located at the north end of the South Project plant site; and 3) The second power line tap point/switchyard located on BLM land and the subject of this data gap request. The proposed switchyard, or substation, on BLM-administered land is currently designed as 400 feet by 340 feet, or approximately 3.1 acres. It is anticipated to consist of a bank of transformers to step up/down voltage (if required, which would also include trans-rupter for transformer protection); a grounding system, to protect humans and wildlife from high voltages that may occur during a fault in the system; and circuit breakers, to interrupt any short circuits or overload currents that may occur in the system. Ancillary design features include concrete pads for mounting of equipment, a surrounding metallic security fence, and central control room/building (not permanently staffed; the switchyard will be remotely supervised and controlled). Fire protection and grounding would be industry standard, as required by the appropriate state/federal regulatory agency. The existing transmission line running between Bonanza and Rangely has a voltage of 138-kV, and the proposed transmission line voltage is also 138-kV. Access to the switchyard would be via an existing unpaved road that departs from Highway 45 in the northeast quarter of Section 10, Township 9 South, Range 24 East and courses east-southeast approximately 2.5 miles to the ROW. The switchyard/substation would require additional temporary workspace of up to 5 acres (for a total disturbance of just over 8 acres), although a portion of this acreage would "overlap" with the permanent ROW for the transmission line.

The switchyard would have the necessary equipment to allow for transmission of electricity *into* the South Project during industrial plant startup and maintenance periods, as well as *outgoing from* the South Project during full operation. At full operation, the South Project is anticipated to be a net exporter of electricity; therefore, the switchyards at the transmission interconnection points will need to be configured for both scenarios.

Data Gap No. 10

"Please provide temporary laydown yard dimensions and acreage for each site.

"*Notes from July 10, 2014 Coordination Call: Enefit to provide response. BLM will need info in order to issue a temporary use permit for construction.*

No response in EAO Response Data Gaps received October 13, 2014."

EAO Response:

The temporary laydown areas are numbered 1 through 6, and the acreages and dimensions can be found in the *EAO_PropLaydownAreas_040813* shapefile attached to the email transmittal of this data gap response.

Data Gap No. 11

"We question the assumption that there will be no upgrade or improvements to existing roads for construction access. Please provide more information on the existing access road plan to verify no upgrades or improvements will be needed. Information in a table format should include:

- Proposed access road numbering system (or some sort of identification system)
- Current access road base material (i.e., paved, gravel, dirt)
- Land ownership
- Road length (miles)
- Road width and acreage
- Adequacy to handle construction traffic (i.e., cranes, lowboy trailers, etc.) and if improvements are required." (DPOD Section 4.5, page 18)

"*Notes from July 10, 2014 Coordination Call: Enefit to provide clarification and understands the comment.*"

EAO Response:

Access roads are shown on the attached figure *Utility Corridor Project Access Roads* and in the attached shapefile *Access_Rds_012615*. They have been placed into three condition categories, and have also been classified by land ownership, with length (in miles) and approximate acreage of each classification provided in Table 1 below. Note that Highway 45 is not included as a formal access road, as this is an existing state highway regularly traveled by large vehicles; however, Highway 45 would serve as the primary access route to the general project area. The following definitions apply to each of the general condition categories:

Existing – No Improvement – Access roads in this category are existing, are not expected to require grading, and are at least 12 feet in width (frequently greater, up to 30 feet width). The roads in this category are unpaved, with the exception of Deseret Power Plant Road and Stanton Road, which are

paved roads. An average width of 16 feet was used to calculate the acreage of roads in this category. All roads in this category are expected to accommodate all types of construction vehicle/equipment traffic.

Existing – Improvement – Access roads in this category are also existing, but have the potential to require some grading prior to construction to allow safe passage of construction vehicle/equipment traffic. These roads are typically 12 feet in width (with some locations as narrow as 10 feet or as wide as 16 feet) and are unpaved. An average width of 12 feet was used to calculate the acreage of roads in this category. Not all segments of all roads in this category will necessarily require improvement, depending on the road condition immediately prior to construction; however, portions of these roads are the most likely to require some degree of improvement. Following improvement, all roads in this category are expected to accommodate most types of construction vehicle/equipment traffic, although longer vehicles (such as pipeline stringing trucks or trucks hauling transmission tower poles) may not be able to use all of these roads.

New – Temporary – Access roads in this category are not existing and would be new, temporary access roads to reach the construction ROW. These roads would be unpaved with an average width of 12 feet, which was used for the acreage calculation, and would be primarily used for access to transmission tower locations. There are only two roads in this classification, one on BLM land and one on private land. The road located on BLM land would be reclaimed following construction, while the road on private land could potentially remain as a permanent access road. The private land where this road is located is wholly owned by EAO.

It is important to note that the "Land Ownership" category does not necessarily correlate to the ownership of the road itself. The existing roads are roads shown in the Roads and Highway System geodatabase maintained by the State of Utah's Automated Geographic Reference Center in partnership with local governments and are generally considered public roads. Land ownership refers to the land adjacent to the road.

Table 1. Utility Corridor Project Access Roads										
	BLM		State		Private		Tribal		**Total**	
	Miles	Acreage	Miles	Acreage	Miles	Acreage	Miles	Acreage	**Miles**	**Acreage**
Existing - No Improvement	29.34	56.90	1.53	2.97	5.11	9.91	0.00	0.00	**35.98**	**69.78**
Existing - Improvement	12.00	1.45	6.55	0.79	3.34	0.40	0.19	0.02	**22.08**	**2.68**
New - Temporary	0.13	0.19	0.00	0.00	0.20	0.29	0.00	0.00	**0.33**	**0.48**
Total	**41.47**	**58.55**	**8.08**	**3.76**	**8.65**	**10.61**	**0.19**	**0.02**		

Data Gap No. 12

"Adequate information *criteria pollutants* provided in Tables A1-1, A1-2, A1-6 to A1-8. What engine emission specification (e.g. Tier II, Tier III) is assumed?" (DPOD Section 5.1)

EAO Response:

The emission factors utilized for generating Tables A1-1, A1-2, and A1-6 to A1-8 were drawn from the South Coast (CA) Air Quality Management District's California Environmental Quality Act Handbook. Composite emission factors were used, which have horsepower rating and load factors already "built into" the emission factors; therefore, no particular engine emission specification was employed. Emission factors for SCAQMD scenario year 2016 were used, and the emission factors for this and other scenario years can be found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/emission-factors/off-road-mobile-source-emission-factors-(scenario-years-2007-2025).xls?sfvrsn=2.

Data Gap No. 13

"Adequate information provided in Tables A1-1, A1-2, A1-6 to A1-8. Verify that non-vehicle engines will not be used for construction, or provide information for such engines." (DPOD Section 5.1)

EAO Response:

Non-vehicle engines for the Utility Corridor Project should be limited to temporary portable electric power generators and water pumps for dewatering during the White River crossing microtunnel construction. The portable power generators would be trailer-mounted and would be 120 to 150 horsepower (HP) in size. Approximately five to ten generators would be used intermittently during each construction mobilization, as needed. The water pumps would be small, diesel-fired pumps in the range of 5 to 30 horsepower, with two to four pumps operating at a time. Dewatering of the microtunnel launch and receiver pits would be limited to a few days of pump operation.

Data Gap No. 14

"**See *EAO Response to Data Gaps* – Data Gap No. 37**
1) Describe how the dust control measures identified in the Dust Control Plan are accounted for in Table A1-4.
2) Fugitive construction dust emissions are usually related to acres disturbed, not only the VMT of the construction equipment. Document which fugitive sources are included in the factors in Table A1-4.
3) Clarify how the VMT and acreage values in Tables A1-15 and A1-16 were estimated." (DPOD Section 5.1)

EAO Response:

See below for responses to the above-numbered items:

1) The fugitive dust emission factors in Table A1-4 (submitted to BLM October 10, 2014) were drawn from the United States Environmental Protection Agency's (EPA) AP-42 guidance and are

based on an uncontrolled (i.e. no dust suppression) condition. Watering, which is the primary method of fugitive dust control for the Utility Corridor Project, conglomerates particles and reduces their likelihood to become suspended when vehicles disturb the ground surface. Control efficiency depends directly on how fast the road dries after water is added, which in turn depends on the following combination of factors: (a) the amount (per unit of surface area) of water added during each application; (b) the period of time between applications; (c) the weight, speed and number of vehicles traveling over/disturbing the watered road surface during the period between applications; and (d) meteorological conditions (e.g. ambient temperature, wind speed, cloud cover, etc.) that affect evaporation during the period (EPA AP-42, Chapter 13).

2) The fugitive dust emission factors provided in Table A1-4 (submitted to BLM October 10, 2014) are for grading equipment passes by crawler tractors, graders, rubber-tired dozers, and scrapers.
3) The vehicle miles traveled (VMT) and acreages provided in Tables A1-15 and A1-16 (submitted to BLM October 10, 2014) are based on the acreage of disturbance for each of the utilities, temporary areas, and Dragon Road, assuming 0.5 acre/8-hour day coverage for the tractors, graders, and dozers and 1.0 acre/8-hour day coverage for the scrapers. The VMT formula is as follows:

   VMT = As/Wb * 43,560 sq. ft/acre / 5,280 ft/mile

   where

   As: Acreage of the grading site
   Wb: Blade width of grading equipment, with a default of 12 feet used based on Cat140 Motor Grader

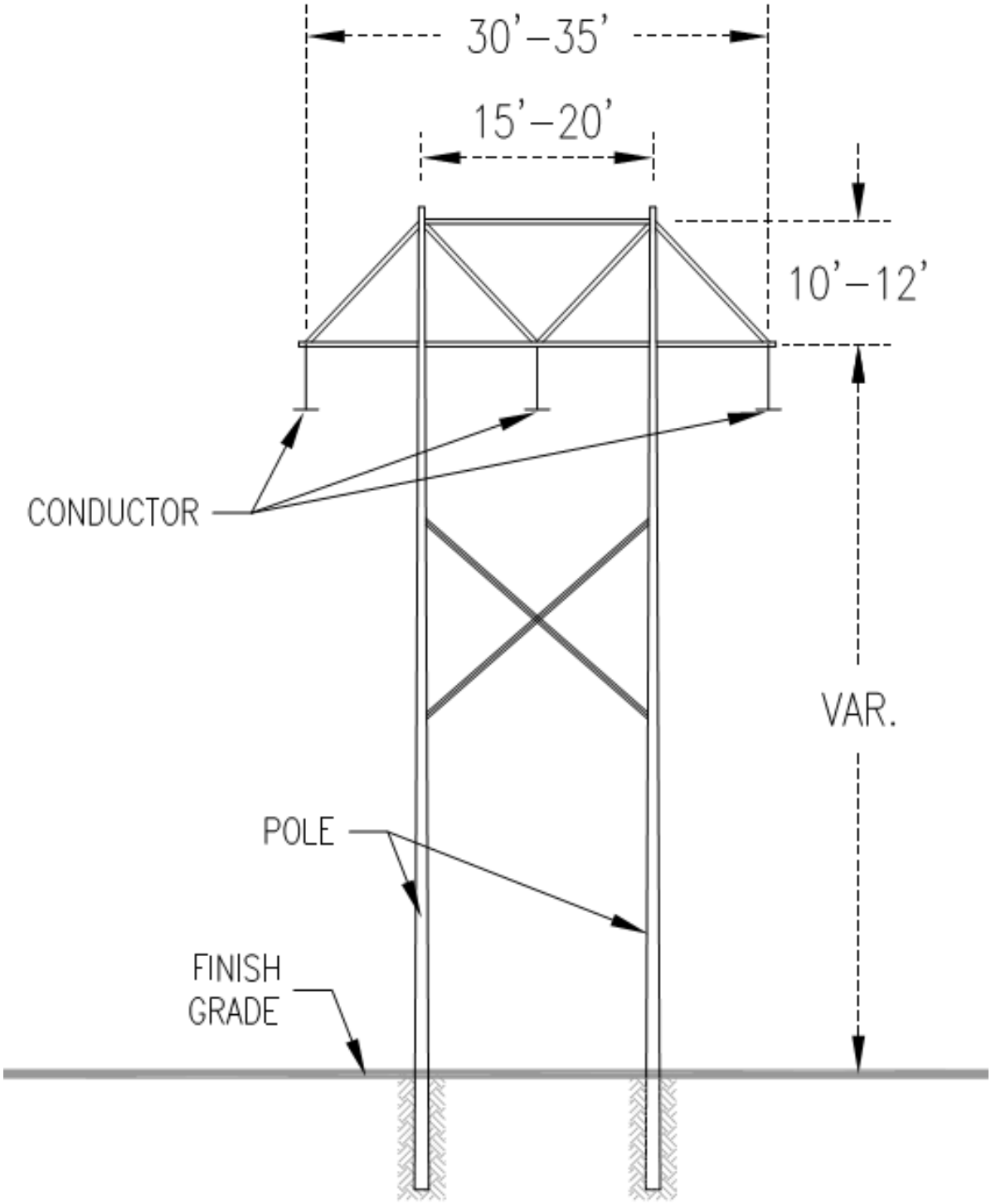
<u>Data Gap No. 15</u>

"Self-supporting steel towers and guyed structures are mention in this section but not previously as part of the project description. Please provide diagrams and details in Section 4.2.

See *EAO Response to Data Gaps* – Data Gap No. 40
More information from right-of-way engineering required." (DPOD Section 5.1.10.1)

EAO Response:

Transmission tower descriptions are provided in Data Gap Response No. 8 above. Steel towers would only be used for dead-end structures or for long spans (e.g. the White River crossing). A typical drawing of a tangent wooden H-frame tower for a 138-kV transmission line is provided below.


30'–35'
15'–20'
10'–12'
CONDUCTOR
VAR.
POLE
FINISH
GRADE

Data Gap No. 16

"**See *EAO Response to Data Gaps* – Data Gap No. 42**
Detailed information not available yet, please forward information when available." (DPOD Section 5.2.2)

EAO Response:

Plans for trash receptacle or contract services are not anticipated to be available until a construction contractor is selected (following completion of the ROW application/grant process). However, all trash would be maintained in closed containers within the workspace, and a plan for construction debris and trash management would be a requirement of the construction contractor during the contracting process. EAO will provide the plans for trash management to the BLM as soon as they are available.

Data Gap No. 17

"**See *EAO Response to Data Gaps* – Data Gap No. 43**
Detailed information not available yet, please forward information when available." (DPOD Section 5.2.2)

EAO Response:

Plans for packaging materials anticipated to become solid wastes (e.g. cardboard boxes, filters, conduit, wire, welding rods, and other discarded construction materials are not anticipated to be available until a construction contractor is selected (following completion of the ROW application/grant process). However, this solid waste material would be maintained in closed trash/debris containers within the workspace, and a plan for construction debris and trash management would be a requirement of the construction contractor during the contracting process. EAO will provide the plans for packaging material disposal to the BLM as soon as they are available.

Data Gap No. 18

"**See *EAO Response to Data Gaps* – Data Gap No. 46**
Detailed information not available yet, please forward information when available." (DPOD Section 5.2.2 and 5.2.3)

EAO Response:

Quantities and container sizes of all products/materials used, stored or produced during construction are not anticipated to be available until a construction contractor is selected (following completion of the ROW application/grant process). However, it is reasonable to assume that typical pipeline and transmission line construction materials will be used, as there are no special, unique, or unproven (i.e. research and development) construction methods proposed for the Utility Corridor Project. EAO will provide typical/representative quantities and container sizes to the BLM as soon as they are available, likely shortly prior to construction.